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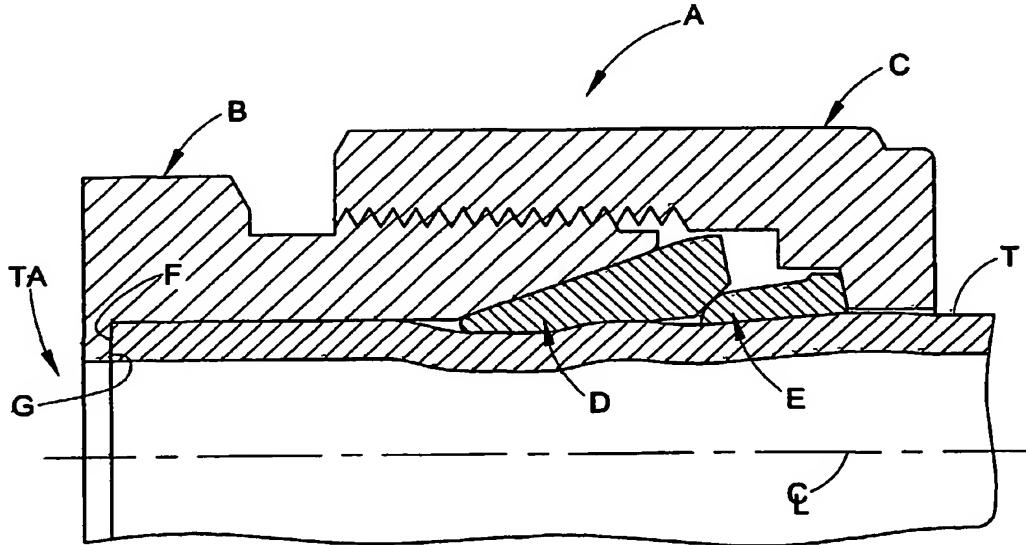
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(54) Title: ULTRASONIC TESTING OF FITTING ASSEMBLY FOR FLUID CONDUITS WITH A HAND-HELD APPARATUS



(57) Abstract: Hand-held apparatus and method for determining relative and/or absolute axial position of a conduit end within a fluid coupling includes application of input ultrasonic energy in the form of transient shear waves and analyzing the reflected energy. Application of the input energy collected at different radial positions about a first axial location is used with wavelet based correlation techniques to better analyze the reflected energy signals. Quality of the abutment between the conduit end and a surface associated with the coupling may also be determined as a separate or combined feature of the axial position determination.

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# INTERNATIONAL SEARCH REPORT

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**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 G01N29/10 G01B17/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	abstract; figures 1A,11 column 1, line 13 - column 8, line 41 -----	2-4
Y	WO 99/31499 A (TRICORN GROUP PLC ; MECON LIMITED (GB); GORMAN MICHAEL (GB); HARPER MA) 24 June 1999 (1999-06-24)	1,5-13
A	abstract; claim 11; figures 1-3,5 page 1, paragraph 1 - page 9, paragraph 1 -----	2-4
Y	US 3 218 845 A (WORLTON DANIEL C) 23 November 1965 (1965-11-23)	1,5-13
A	the whole document -----	2-4
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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International Application No  
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